

CA

21

Self-ignition and storage of brown-coal semi-coke.
Jaromir Illek. *Paliva* 31, 225-30(1951).—The semi-coke
of brown coal in bulk storage tends to ignite spontaneously,
particularly in summer. Heat is generated by processes
such as adsorption of gases, oxidation, and absorption of
 H_2O . Granular semi-coke of grain sizes larger than 10 mm.
is safe. Finer particles tend to self-ignite at the base of the
pile, with the ashes formed preventing further burning.
Large piles can be stored safely when sprayed with a H_2O
suspension of lime. James L. Jell

JILEK, JAROMÍR

Source

✓ Newer gasification techniques. Jaromír Jilek, *Polina*
32, 208-13(1952).—Air is replaced by O₂ in a modern gas
works, especially in synthesis-gas production. The Kop-
pers-Totzek generator with fine coal dust, its principle,
operation, and cost calen. are described. The Lacote sys-
tem with coarse-grain coal is also described. —J. L.

FW

CZECH

2231. NEW METHODS OF GASIFYING PULVERIZED FUEL. Jilek, J. (Palava (Fuel, Prague), May 1953, vol. 33, 97-104; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 15 Apr. 1954, (8), 247). The following plants are described. The Fler-Winkler, in which the steam-oxygen blast is passed alternately from top to bottom to top, with an output of 1000-1700 cu m/sq. m of sectional area; the I.C.I. three-chamber generator of water gas, producer gas and carbonisation gas; the vibration generator, in which explosions of a mixture of pulverized fuel and air create rapid vibrations (80-100/min) of high amplitude and ensure good mixing of fuel and hot air; the Vertex cyclone generator, whose feeder runs at 1750 rev/min and passes 45.4 tons/h of coal; the Lurgi-Ruhrgas generator for very fine dust, which uses corundum balls as a solid heat carrier; and the two chamber generator with direct gas heating, producing water gas and lean gas. High output per unit of working space is a common feature of all these.

JILME, J.

"Increasing The Heat Of Combustion Of Fuel Gas From Brown Coal.
(To Be Contd.)." p. 117. (Paliya. Vol. 32, No. 11, Oct. 1953, Praha.)

SO: Monthly List of East European Accessions, Vol. 3, No. 3, Library of Congress, March 1954, Uncl.

J. L. E. J.
C Z E C H

Fluidization technique for gasification of powdered fuels in a Winkler generator. J. L. E. J. Pages 34, 183-6 (1964).—Various generators are described. A schematic drawing of a Winkler-type generator and characteristic gasification values are given. Tables are given showing the fluidization of coal according to the size in mm. and height of the bed, the amt. of coal dust in the bed at different speeds of flue gas, the influence of the temp. in the generator, etc. J. L.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3"

JILEK, J.

Economical method for drying crude coal.

p. 323

Vol. 34, no. 12, Dec. 1954

PALIA

Praha

SOURCE: East European Accessions List (EEAL), LC, VOL. 5, no. 3, March 1956

Jilek, J.

V¹²³²
FU (Paliya (Fuel, Prague), 1955, vol. 35, 2-7; see abstr. in Chem. Abstr. 1955,
vol. 49, 12677, 12818). (L). Jilek, J.

Jilek, J.

✓ 236. PRESSURE GAS PRODUCER WITH OR WITHOUT REFRACTORY LINING?
Jilek, J. (Puliva (Fuel, Prague), Aug. 1955, vol. 35, 240, 241). The
savings obtained by omitting the refractory lining are calculated. (L.)

Jilek, J.

V Gasification of low-value coals. J. Jilek (Plynoprojekt, Prague). *Palina* 36, 60-7(1956). Data are compared of 10 coals and cokes of different grades and from various countries, and their response to burning in Lurgi-Schweizer Otto Bochum, rotating grid furnace, and in Winkler and Fiesch-Winkler generators is given. T. Jurcic

CZECHOSLOVAKIA / Chemical Technology. Chemical Products H-22
and Their Application. Chemical Pro-
cessing of Solid Fossil Fuels.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 2438.

Author : Jilek, J.

Inst : Not given.

Title : The Study on a Problem of Complex Chemical-
Energetic Utilization of Brown Coal.

Orig Pub: Paliva, 1956, 36, No 7, 216-225.

Abstract: The fundamental technological scheme was exam-
ined for the complex chemical — energetic
processing of brown coal under Czechoslovakian
conditions. A mixture of young brown coals is
being sorted, which is composed of two types
having the following composition (in %) : mois-
ture 42, ash 12, tar yield 8.7 and caloric value
3300 kilocalories/kilogram. Coal of the 0-12

JILEK, Jaromir [Jilek, Jaromir]; ZHUKOV, A.A., inzhener [translator];
SHISHAKOV, N.V., doktor tekhnicheskikh nauk, redaktor; KLEYMENOVA,
K.F., vedushchiy redaktor; MARTYNOVA, M.P., vedushchiy redaktor;
POLOSINA, A.S., tekhnicheskiiy redaktor

[New methods of gasification of fuel by oxygen. Translated from the
Czech] Novye sposoby gasifikatsii topliva kislorodom. Perevod s
cheshskogo A.A.Zhukova, pod red. N.V.Shishakova. Moskva, Gos.nauchno-
tekhn. izd-vo nef. i gorno-toplivnoi lit-ry, 1957. 362 p. (MLRA 10:9)
(Gas producers) (Coal gasification)

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3"

CZECHOSLOVAKIA/Chemical Technology - Processing of Solid
Fossil Fuels.

H-22

Abs Jour : Ref Zhur - Khimiya, No 24, 1958, 82970

Author : Jilek, J.

Inst : -

Title : The Purification of Ascending Gas by a Rectisol Method.

Orig Pub : Paliva, 1957, 37, No 0, 261-263.

Abstract : The method is based on the application of methanol as the solvent; one cubic meter of the latter at -60°C . adsorbs CO_2 72 times more than one cubic meter of water at 20°C . The dimensions of equipment are considerably smaller, whereas the process is simplified because in addition to CO_2 adsorption the methanol purifies the gas from the benzene impurity, S-compounds, tar-forming substances and dries the gas. A description of the technological scheme for the purification is given and the savings, resulting from the introduction of the method, are evaluated.

Card 1/1

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and
Their Application. Treatment of Solid Mineral
Fuels.

H

Abs Jour: Ref Zhur-Khin., No 13, 1958, 44531.

Author : Jilek J.

Inst : _____

Title : Low Temperature Carbonization of Bituminous Shale
in China.

Orig Pub: Paliva, 1957, 37, No 12, 419-421.

Abstract: Presentation of particularized data (with appended
diagrams) relating to vertical gas generators with
distillation shafts for low temperature carboni-
zation and gasification of Fushun shale, having a
shaft diameter of 2.6, 3.0 and 3.35 m. These gas

Card : 1/2

JILEK, J.

COUNTRY : Czechoslovakia
CATEGORY :

F

ABST. JOUR. : RZKhim., No. 20 1959, No. 71331

AUTHOR : Jilek, J.

INVT. :

TITLE : A Source of High Voltage for Electromigration Processes

ORIG. PUB. : Chem. listy, 1958, 52, No 9, 1833-1834

ABSTRACT : Description of a source of high voltage for electrophoresis in paper, with an output of 3000 v and 1 a, or 5000 v and 0.75 a. The stepless control rectifier is a full-wave rectification circuit using UA 1 a gas-filled, gridless rectifier tubes. -- O. Knessel.

CARD:

3

JILEK, J.

On the all-round effectiveness of utilizing lignite and its products through combustion. (Conclusion) p. 95

PALIVA. (Ministerstvo paliv a Ceskoslovenska vedecka technicka spolecnost pro vyuziti pri Ceskoslovenske akademii ved) Praha, Czechoslovakia, Vol. 39, No. 3, Mar. 1959

Monthly List of East European Accessions (EEAI), LV, Vol. 8, No. 7, July 1959
Uncl.

JILEK, J.; SLIVA, V.; DAHNELKA, J.

Use of lignite in the gas industry. p. 223.

PALIVA. (Ministerstvo paliv a Ceskoslovenska vedecka technicka spolecnost pro vyuziti paliv pri Ceskoslovenske akademii ved) Praha, Czechoslovakia, Vol. 39, no. 7, July 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 11,
November 1959.

uncl.

JILEK, J., dr.

Economy of various methods of pressure gas cleaning.
Paliva 41 no.1:30-40 Ja '61.

JILEK, J., dr.

Examination of the economy of pressure gasification of ash and sulfur coal. Paliva 41 no.10:299-308 0 '61.

1. Plynoprojekt, Praha.

JILEK, Jaromir, dr.

Control of the dispersion of fumes by changing their temperature. Energetika Cz 12 no.10:521-525 0 '62.

1. Plynoprojekt, Praha.

JILEK, J., dr., inz.

Inertization of an explosive gas mixture by impure nitrogen.
Paliva 42 no.10:299-301 0 '62.

1. Plynoprojekt, Praha.

RIEDL, R.; BENES, M.; JILEK, J., dr., inz.

Separation of condensates in lignite gasification under pressure.
Pavlika 43 no.2:42-44 F '63.

JILEK, J., dr. inz.

Development of lignite pressure gasification in Yugoslavia.
Paliva 44 no.9:274-277 S '64.

1. Flynoprojekt, Prague.

JILEK, J., dr. inz.

Gasification of solid and liquid fuels in the Koppers-Totzek generator. Paliya 45 no.2:49-53 F '65.

1. Plynoprojekt, Prague.

CZECHOSLOVAKIA

JILEK, J.O; PELZ, K; VEJDELEK, Z.J; PROTIVA, M

Research Institute for Pharmacy and Biochemistry (Forschungs-
institut fur Pharmazie and Biochemie), Prague

Prague, Collection of Czechoslovak Chemical Communications,
No 1, January 1966, pp 269-278

"Neurotropic and psychotropic substances. Part 7: 2-alkoxy-9-
(3-dimethylaminopropyliden) thioxanthene and an additional
derivative of prothixene."

. CZECHOSLOVAKIA

JILEK, J. TRAVNICKOVA, E., TROJAN, S; Physiological Institute,
Faculty of General Medicine, Charles University (Fysiologicky
Ustav Fak. Vseob. Lek KU), Prague.

"Influence of Hypoxia on Glycogen Metabolism in the CNS in
Ontogenesis."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 112-113

Abstract: Changes in the amount of glycogen and lactic acid in
rat prosencephalon (P) and rhombencephalon (R) caused by 6
minutes of hypoxia at a simulated elevation of 12,000 meters was
investigated. Rats were either adult or 5, 12 or 25 days old.
Between the ages of 12 and 25 days hypoxia causes a decrease of
glycogen in the brain and an increase in P and R. At other ages
no changes were observed. In 12 day old rats lactic acid content
increased by 300%. 1 Czech reference. Submitted at "16 Days of
Physiology" at Kosice, 28 Sep 65.

1/1

- 161 -

Jilek, Josef

Distr: 4E3d

8.11-116

Jilek, Josef, Vodíkové pumpy a vývoj počítačů

[Hydrogen bombs and

SSR 4-23.454.8
wearbar develop-

JILEK, J.

Seasons of the year.

p. 65 (Meteorologicke Zpravy) Vol. 10, no 3 June 1958. Praha, Czechoslovakia.

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 79 no. 1, Jan 1958

JILEK, JOSEF

J 10.4-265 551.517(437.1)
 [Jilek, Josef, *Atmosférické srážky v Čechách* (1876-1956). [Precipitation in Bohemia, 1876-1956.] *Meteorologické Zprávy*, Prague, 10(5):133-134, 1957. 2 tables. DWB—
 Average precipitation values for Bohemia (average of all stations) are tabulated for every month from Jan. 1876 to Sept. 1957. Monthly and annual normals are also given in terms of intervals containing precipitation amounts which occurred in 50% of all cases. *Subject*
Headings: 1. Precipitation normals 2. Precipitation data 3. Czechoslovakia.—G.T.

Jw
 1/1

12

2

JILEK, J.

SCIENCE

Periodicals: METEOROLOGICKE ZPRAVY. Vol. 11, no. 6, Dec. 1958

JIDEK, J. Balance sheet of solar radiation in Prague. p. 165.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5,
May 1959, Unclass.

L 31482-66 FCC GW

ACC NR: AP6023106

SOURCE CODE: CZ/0085/65/000/005/0169/0170

AUTHOR: Jilek, Josef

ORG: HMU, Prague

TITLE: Problems of long term weather forecasting 12

SOURCE: Meteorologické zpravy, no. 6, 1965, 169-170

TOPIC TAGS: long range weather forecasting, atmospheric pressure, atmospheric temperature, synoptic meteorology, atmospheric circulation

ABSTRACT: Long term forecasting of weather is extremely difficult. The author believes that the only reliable approach to the problem is the study of the general atmospheric circulation. The forecast should be based on the expected average barometric pressure and temperature, the sequence and type of the individual processes of circulation, and on the synoptic chart. A comparison of Russian, German, British, and the USA long term weather forecasting is made. Particular attention is given to the British method of weather forecasting. [JPRS]

SUB CODE: 04 / SUBM DATE: none

Card 1/1mc

UDC: 551.509.22

JILEK, J.O.; POMYKACEK, J.; JIRKOVSKY, I.; PROTIVA, M.

Synthetic ataractics. X. Improved methods of preparation of phenoharman. Cesk. farm. 13 no. 5:229-233 Je'64

1. Vyzkumny ustav pro farmacii a biochemii, Praha.

Antihistamine substances—basic aryl ethers, alkaryl ethers, and alkaryl thioethers. M. Protiva, J. Bilek, J. Kolínský, V. Růžička, and J. Urban. *Collection Czechoslov. Chem. Commun.*, 13, 326-39(1948)(in English).—A series of dialkylaminoalkyl aryl ethers and thio ethers are synthesized and tested as antihistaminic agents. To 11 g. 1,2-C₂H₄(OH)₂ in a soln. of 10 g. Na in 250 ml. abs. EtOH is added 22 g. EtNCH₂CH₂Cl; the mixt. refluxed 1 hr., the pptd. NaCl filtered off, the alc. evapd., the residuum mixed with H₂O, extd. with Et₂O, and the Et₂O soln. dried and distd. to give 1,2-C₂H₄(OCH₂CH₂NH-Et)₂ (I), b.p. + 165-75°; di-HCl salt, m. 115°. The antihistaminic activity of I (expressed as mg. necessary to neutralize contraction of an isolated guinea pig intestine caused by 0.01 mg. histamine) is 2-4. The compds. listed below are prepd. in similar manner. The 1st no. following the compd. consists of the derivs. of each compd. in some cases histamine activity and the 2nd no. present in some cases the toxicity of the compd. expressed as mg./kg. of the animal compd. necessary to kill 50% of the test animals (animal used not specified): 1,3-C₃H₆(OCH₂CH₂NH-Et)₂, b. 191-200° (di-HCl salt, m. 131°); diplicate, m. 117-18°, 20°; 1,4-C₄H₈(OCH₂CH₂NH-Et)₂, b. + 178-82° (di-HCl salt, m. 155°); diplicate, m. 184-5°, 100°; 1,2,3-C₃H₆(OCH₂CH₂NH-Et)₃, (di-HCl salt, m. 197°); triplicate, m. 170-7°, 60°; 1,3,4-C₃H₆(OCH₂CH₂NH-Et)₃, diplicate, m. 101-2°, 35°; PhC(CH₃)₂CH₂CH₂NH-Et, b. 141-0° (picrate, m. 64-55°, 10-5°); benzyl 2-(1-piperidinomethyl ether), b. 184-5°, 10-5°; 107-8° (HCl salt, m. 100-5-5°); HBr salt, m. 144-5°, methoxide, m. 157-8°; picramide, m. 121-5°, 144-5°; methoxide, m. 208-8-5°, 0-210, 100°; PhC(CH₃)₂CH₂CH₂CH₂NH-Et, m. 111°, 0-00, 8-5°; PhC(CH₃)₂CH₂CH₂NEt₂-HCl, m. 129°, 2-5°; di-1,2-diphenyl-1-(2-dimethylaminoethoxy)ethane, b. 153-65° (HCl salt, m. 129°, 2-5°); di-1,2-diphenyl-1-(2-diethylaminoethoxy)ethane, b. 169-71° (HCl salt, m. 108-47°, 11°); di-1,2-diphenyl-1-(2-piperidinomethyl ether), b. 100-5° (HCl salt, m. 121-4°, 0-220, 80°); benzyloxy 2-(1-piperidinomethyl sulfide)-HCl, m. 170-7°, 1°; benzyloxy 2-(4-oxoaminomethyl sulfide)-HCl, m. 100-5°, 0-5, 242°. D. A. S.

C.A.

10

Antihistamine substances. X. Polycyclic analogs of benzhydryl ethers. J. O. Jick, J. Urban, and M. Protiva. *Chem. Listy* 43, 56-8 (1949); cf. C.A. 43, 38104 and preceding abstr.—The following basic ethers are prepd. by the usual methods. *n*-(1-Naphthyl)benzyl ethers: 2-dimethylaminoethyl, 70% yield, *b.p.* 170-92° (HCl salt, m. 102-3°; picrate, m. 148-9°); 2-diethylaminoethyl homo-log, 50%, *b.p.* 190-201° (HCl salt, m. 140-1°); 2-(1-piperidyl)ethyl, 47%, *b.p.* 223-6°. 9-Fluorenyl ethers: 2-dimethylaminoethyl, 66%, *b.p.* 166-70° (methiodide, m. 211°); 2-diethylaminoethyl, 73%, *b.p.* 170-5° (HCl salt, m. 141-1.5°); 2-(1-piperidyl)ethyl, *b.p.* 180-205° (HCl salt, m. 161-2°); 2-(4-morpholinyl)ethyl, *b.p.* 200-20° (HCl salt, m. 177°). The antihistamine activities of these products are relatively low (20-100 times less than Benadryl). XI. Ethers derived from substituted 2-aminocyclohexanols. V. Reficha. *Ibid.* 109-13.—2-Dimethylaminocyclohexanol (I), prepd. by heating equimol. quantities of cyclohexene oxide and Me₂NH in EtOH 12 hrs. at 100°, *b.p.* 108-242° (yield 80%). In a similar manner have been prepd. the following analogs of I: 2-diethylamino (II), 15 hrs. at 120°, 85%, *b.p.* 131-5° (HCl salt, m. 172.5-5°); 2-(1-piperidyl) (III), 81%, *b.p.* 131-5° (HCl salt, m. 224-2° (decomps.)); picrate, m. 154-5°; 2-(4-morpholinyl) (IV), 92%, *b.p.* 145-7°, m. 38-9° (HCl salt, m. 225-6°; picrate, m. 145-6°). Heating 1 mol. 2-chlorocyclohexanol with 2 mols. Et₃NH in BuOH 14 hrs. at 150-60° also gave 62% II, *b.p.* 223-30° (HCl salt, m. 172-2.5°). II with SOCl₂ in C₆H₆ gives 65% of the unstable 2-diethylaminocyclohexyl chloride (IV), *b.p.* 102-6° (cf. C.A. 40, 21519). Similarly III gives 2-(1-piperidyl)cyclohexyl chloride, *b.p.* 145-7° (HCl salt, m. 195-0°). To 0.95 g. Na in 30 ml.

EtOH are added 3.8 g. phenol and then 7.5 g. IV in EtOH. The mixt. refluxed 6 hrs., the EtOH evapd., the residue extr. with dil. HCl, the base liberated by NaOH, extr. with Et₂O, and the Et₂O soln. dried and distd. to give 23% 1-phenoxy-2-(diethylamino)cyclohexane, *b.p.* 154-8° (picrate, m. 116-16°). Similarly have been prepd. 1-thymoxy-2-(diethylamino)cyclohexane, 34%, *b.p.* 158-62° (HCl salt, m. 230-1°; picrate, m. 137.5-8°), and, from PhCH₂(ONa) and IV in C₆H₆, 1-benzyloxy-2-(diethylamino)cyclohexane (V), yield 17%, *b.p.* 146-51° (picrate, m. 106-7°). V was obtained also in 38% yield from the Na deriv. of II and PhCH₂Cl in C₆H₆. To 21.5 g. I and 20.5 g. dried Na₂CO₃ was added slowly with stirring at 120° 37.1 g. PhCH₂Br, the mixt. heated at 120-60° 4 hrs., the mixt. dild. with C₆H₆, the pptd. NaBr filtered off, the base extr. with dil. HCl, liberated again with NaOH, extr. with Et₂O, and the Et₂O soln. dried and distd. to give 54% 1-benzhydryloxy-2-(dimethylamino)cyclohexane, *b.p.* 177-84° (HCl salt, m. 160-1°). The following derivs. of 1-benzhydryloxy-2-(dimethylamino)cyclohexane were prepd. similarly: 2-diethylamino, 36%, *b.p.* 182-4° (HCl salt, m. 181.5-3°); 2-(1-piperidyl), 37%, *b.p.* 200°, m. 51-2° (HCl salt, m. 193-2.5°; methiodide, m. 146-7°); 2-(4-morpholinyl), 21%, *b.p.* 215-18°, m. 49-51° (HCl salt, m. 177-9°). All the products are assumed to have the trans configuration. They show a 50-100 times lower level of antihistamine activity than benadryl. XII. Piperidine and morpholine analogs of antergan, pyribenzamine, and neo-antergan. V. Reficha and M. Protiva. *Ibid.* 176-9.—From PhNHCH₂Ph, 2-benzamido-pyridine (picrate, m. 164.5°), and 2-(*p*-methoxybenzamido)pyridine (picrate, m. 158°), the compds. listed below have been prepd. by the NaNH₂ condensation with 2-(1-piperidyl)ethyl chloride, 2-(4-morpholinyl)ethyl chloride and Me₂NCH₂CH₂Cl in C₆H₆ (cf.

(over)

C.A.

SOME SUBSTITUTED 4-ETHOXYBENZAMIDINES. J. O. Jilek, M. Porobička, and M. Protiva. Chem. Listy 43, 211-13 (1949).--p-Ethoxybenzamide, m. 265.5-6.5° (from ether-EtOH), was prepd. from p-EtOC₆H₄CN through Et p-ethoxybenzimidate-HCl (I), m. 207°. N-Methy-p-ethoxybenzamide, prepd. from 1 mol. I and 8 moles MeNH₂ (30 hrs. at room temp.), m. 166-6.8°. The N, N-di-Me compd., prepd. analogously from I and Me₂NH, m. 227-8° (from EtOH-Et₂O). p-(2-Hydroxyethoxy)benzonitrile (II), obtained from 0.25 mole Na salt of p-EtOC₆H₄CN and 0.25 mole HOCH₂CH₂Cl (yield, 73%), m. 87.5° (from C₆H₆). p-(2-Hydroxyethoxy)benzamide (III), m. 237° (from 90% EtOH). (HCl salt, m. 232-6°), was prepd. from II through Et p-(2-hydroxyethoxy)benzimidate-HCl, m. 127-8° (decompn.) (overall yield, 75%). p-(2-Chloroethoxy)benzamide (IV) was obtained from III. HCl with SOCl₂ or POCl₃. IV. HCl, m. 259-60° (from MeOH). None of the compds. described showed antihistamine properties. M. Rudický

Chem A

XV, needles, m. 218° (decompn., from 50% EtOH). A soln of 20 g. XVII in 250 ml. NaOEt (contg. 2.8 g. Na) was stirred 30 min., filtered the next day, and the filtrate evaporated under reduced pressure, giving XV, prisms, m. 158-9° (from EtOH). XV is not stable and turns red-brown in air. Trituration with EtOH and filtration of the compact mass resulting from the treatment of 23 g. $\text{NCCH}_2\text{CO}_2\text{Et}$ with 0 g. IV yielded 18 g. *N,N'*-bis(cyanomethyl)ethylenediamine, m. 102-3° (from EtOH). Recrystn. from EtOH (contg. charcoal) of the melt resulting from heating (200°, 2 hrs., oil bath) $\text{NC}(\text{CH}_2)_2\text{CO}_2\text{Et}$ and ethylenediamine *p*-toluenesulfonate gave an unidentified product, white needles, m. 241-2°. $\alpha\text{-C}_6\text{H}_4\text{CO}_2\text{NCH}_2\text{CH}_2\text{CN}$ (17 g.) in 50 ml. dry CHCl_3 and 3 ml. EtOH was sol'd. with dry HCl at 0°, the mixt. allowed to stand 10 days, and the solvents dis'd. oil; the crystals of XII soften 95-100° (slow heating), resolidify and finally m. 230°. An attempt to prep. *N*-substituted deriva. of I by the Mannich reaction between 1-benzyl-lysine and piperidine or Et_3NH (as HCl salts) and HCHO was unsuccessful. The acid succinate (XVIII) deriv. of lysine, m. 182-3° (from EtOH). A suspension of XVI (15 g.) in 50 ml. EtOH was treated with 200 ml. 8% alc. NH_3 (shaking, 30 min.), and the soln. conc'd. after several hrs., yielding 5.5 g. $\alpha\text{-(carbamylamidocarboxy)sericimidine HCl}$ (XIX), m. 176-7° (from aq. EtOH). The XIX prepd. above differs in behavior upon heating from the XIX prepd. by Plummer (Ber. 28, I, 479 (1895)). Lawrence Rosen

1951

CA

10

1-Carboethoxymethyl-3-acetylpyridinium bromide. J. O.
1964, *Chem. Listy* 44, 41(1950).—3-Acetylpyridine (1.8
g.) and 2.3 g. $\text{BrCH}_2\text{CO}_2\text{Et}$ were heated 30 min. with
stirring in 2 ml. C_6H_6 on a steam bath giving 3.3 g. 1-
carboethoxymethyl-3-acetylpyridinium bromide, m. 124-6°, after
a few crystals from Me_2CO . M. Hudlický

CA

16

N-Substituted 4-amino-3,3-diphenyl-2-butanones. J. O. Jick and M. Protiva. *Chem. Listy* 44, 49-51(1930).
 4-(1-Piperidyl)- (I), 4-(4-morpholinyl)- (II), and 4-dimethyl-
 4-(1-Piperidyl)- (III) were prepd. by the
 amino-3,3-diphenyl-2-butanone (IV). To prep. IV, Ph-
 Maunich reaction from PhCH₂Ac (IV). To prep. IV, Ph-
 CH₂Ac was brominated in ether to give 93% PhCHBrAc.
 which gave 65% IV by heating with C₆H₆ and AlCl₃. An-
 other method for prepg. IV was the reaction of PhCHCOCl
 with MeCdCl prepd. from MeMgBr and CdCl₂ (yield 50%).
 C₆H₅NH₂·HCl (3.3 g.), 5.7 g. IV, 1.2 g. (CH₃O)₂, and 4 drops
 concd. H₂SO₄ were refluxed on the steam bath 1 hr., 0.75 g.
 (CH₃O)₂ added, heating continued 2 hrs., and the mixt.
 poured into 100 ml. Me₂CO to give 3.35 g. I, m. 195-6°;
 an addnl. 1.5 g. was obtained from the mother liquors. The
 yield of I, m. 204-5° (from EtOH), b.p. 153-6° (decompn.),
 was 51%. II (45%), m. 192.5°, was prepd. analogously
 from morpholine-HCl. III (10%), m. 165-6° (from ace-
 tone), was prepd. from Me₂NH₂·HCl. A better yield
 (38%) was obtained when 7 g. IV, 4 g. Me₂NH₂·HCl, and
 1.5 g. (CH₃O)₂ were refluxed 45 min. at 140° in 20 ml. iso-
 AmOH and the mixt. treated with an equal vol. of ether.
 The salt was purified as free III, liberated by NaOH.
 M. Hudlický

JILEK, JIRI O.

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Antihistamine substances. XXVI. Some new heterocyclic derivatives of ethylenediamine. Miroslav Protiva, Jiri O. Jilek, Zdenek J. Vejdelék, and Otto Eimer (Pharm. Research Inst., Prague, Czech.). *Chem. Listy* 46, 551-4 (1952); cf. *C.A.* 47, 4306a; 48, 144c. Alkylation of 4-phenyl-1,2,3,4-tetrahydroquinoline (I), acridan (II), and 2-phenyl-6-methyl-4-azaindole (III) with *N*-substituted aminoalkyl chlorides gave new heterocyclic derivs. of $(CH_2NH_2)_2$, of which only acridan derivs. showed antihistamine activity. 4-Phenylquinoline (10 g.) reduced with 16.5 g. Na in 185 ml. boiling BuOH gave, through its HCl salt, m. 209-15°, 3.7 g. (37%) I, m. 61-7° (from EtOH). II, m. 168-70°, was prepd. in 71% yield by the reduction of 3-acridanone with Na in AmOH. For the prepn. of III, 3-nitro-2,6-lutidine, m. 37°, b. 220-30°, was hydrogenated over Raney Ni to give 70% 3-amino-2,6-lutidine, m. 123°, b. 128-35°; this treated with BzCl yielded 70% 3-benzamido-2,6-lutidine, m. 171°, which was cyclized to III, m. 280° (decompn.), with NaOEt in 71% yield. I, II, and III with $NaNH_2$ and (alkylamino)alkyl chlorides gave the following *N*-derivs. of I (% yield and b.p.): I, $Me_2NCH_2CH_2$, 88, b.p. 150-60° (HCl salt, m. 215-17°); $Et_2NCH_2CH_2$, 83, b.p. 165-75° (HCl salt, m. 162.5°); (2-piperidinoethyl), 75, b.p. 180-200° (HCl salt, m. 239-40°); (2-morpholinoethyl), 27, b.p. 180-200° (HCl salt, m. 225-7.5°). Derivs. of II: $Me_2NCH_2CH_2$, (IV), 45, b.p. 188-200° (picrate, m. 165-6°); $Et_2NCH_2CH_2$, 53, b.p. 220° (picrate, m. 260-71°); Me_2NCH_2CHMe (V), 61, b.p. 183-4°; Et_2NCH_2CHMe , 35, b.p. 170-11° (picrate, m. 158°). Deriv. of III: $Me_2NCH_2CH_2$, 45, b.p. 200-4° (2HCl.2H₂O, m. 213-14°; dipicrate, m. 212°). The disuccinates of IV and V showed 7 times and 2.5 times the antihistamine activity of Benadryl. M. Hudlický.

JILEK, J. O.

(2)
Protiva, M., and Jilek, J. O.: Zaklady pracovni techniky
v organickochemické laboratorii. Prague: SNTL, 1953.
120 pp. Kcs. 8.20. Reviewed in Chem. Listy 48, 324
(1954).

JILEK, J.O.; BOROVICKA, M.; PROTIVA, M.

Synthetic antispasmodics. Part 5. Cyclic analogues of substances of the
3,3-diphenylpropylamine series [in English with summary in Russian].
Sbor.Chekh.khim.rab. 18 no.2:257-269 Ap '53. (MLRA 7:6)

1. Pharmaceutical and Biochemical Research Institute, Prague.
(Antispasmodics)

JILEK, J., PROTIVA, M.

"Parasympathomimetics. I." "Synthetic spasmolytics." VII. "Synthesis of a new sulphur analogue of acetylchlorine and sulphonium salts of the "Tifene" type. p. 219. (CHEMICKE LISTY, Vol. 47, #2, Feb. 1953, Czechoslovakia)

SO: Monthly List of East European Vol. 2, #8 Library of Congress, August 1953, Uncl.
1953, Uncl.

JILEK, JIRI O.

CZECH

Synthetic experiments in the estrogenic hormone series.
II. Synthesis of crystalline ethyl 2-methyl-2-carbethoxy-5-(4-methoxyphenyl)cyclohexan-1-one-6-acetate. Jirí O. Jilek, Vladislav Šmák, and Miroslav Protiva (Farm. biochem. výzkumný ústav, Prague, Czech.). Chem. Listy 47, 874-80 (1953); Collection Czechoslov. Chem. Commun. 19, 233-9 (1954) (in English); cf. C.A. 47, 8034c. The Friedel-Crafts reaction of Et 2-methyl-2-carbethoxy-5-cyclohexan-1-one-6-acetate (I) with MeOPh gave Et 2-methyl-2-carbethoxy-5-(p-methoxyphenyl)cyclohexan-1-one-6-acetate (II) which was transformed to 2-methyl-5-(p-methoxyphenyl)-1-cyclohexanone-6-acetic acid (III). 2-Carbethoxycyclohexanone (75 g.), 10 g. Na dust, and 250 ml. C₆H₆ refluxed 4 hrs., the mixt. treated with 75 g. BrCH₂CO₂Et, refluxed 5 hrs., decompd. with 200 ml. dil. HCl, and the C₆H₆ layer washed, dried, and distd. gave 84 g. (74%) Et 2-carbethoxycyclohexanone-2-acetate (IV), b_p 160-68°, ClCH₂CO₂Et gave only 60% yield. Similarly was prepd. the di-Me ester (42%), b_p 153-5°. IV (24 g.) refluxed 8 hrs. with 2.4 g. Na and 35 ml. EtOH gave, after acidification and extrn. 13 g. (64%) Et 2-carbethoxycyclohexanone-6-acetate (V), b_p 130-45°. V (13 g.) refluxed 7 hrs. with 70 ml. C₆H₆ and 1.2 g. Na dust, cooled, treated with 10 ml. MeI, let stand 2 hrs. at room temp., then refluxed 2 hrs., yielded 8.5 g. (63%) Et 2-methyl-2-carbethoxycyclohexanone-6-acetate (VI), b_p 110-20°, also obtained (b_p 160-7°), without isolating V, by refluxing 20 g. IV 8 hrs. with 2 g. Na in 30 ml. EtOH. Bromination of VI in CCl₄ yielded 84% Et 2-methyl-2-carbethoxy-6-bromocyclohexanone-6-acetate (VII), b_p 144-7°.

Dehydrobromination of VII by refluxing with MeONa or with collidine gave, resp., 71% and 85% I, b_p 111-2° (lit. 147-51°). I (21 g.) and 70 ml. PhOMe treated at -5 to 0° with 30 g. AlCl₃ and 70 ml. PhOMe, treated at 84° (from C₆H₆) yielded 16 g. recovered I and 4 g. (90%) II, b_p 200-10°, m. 84° (from C₆H₆). Sapon. of 0.4 g. II by refluxing 1 hr. with aq. NaOH gave 0.3 g. III, m. 138°. Sapon. of IV with NaOH in MeOH gave 40% 1,2,6-trimethylcyclohex-1-ene-1,2,6-tricarboxylic tri-Me ester (VIII), m. 163-8°. Refluxing 4.9 g. VIII with 0.5 g. Na dust and 10 ml. C₆H₆ 18 hrs. in a N atm., dig. 10 ml. MeI gave 0.4 g. (65%) Me 2-methyl-2-carbomethoxycyclohexanone-6-acetate, b_p 115-24°, which on bromination in CCl₄ yielded Me 2-methyl-2-carbomethoxy-6-bromocyclohexanone-6-acetate, m. 90-3°. III. Synthesis of racemic 1-ethyl-2-methyl-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrenecarboxylic acid. Miroslav Protiva and Ludvík Novák. Chem. Listy 47, 831-4. Me 1-oxo-2-methyl-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrenecarboxylate, m. 136-7° (I), was obtained by the following series of reactions: 1-naphthol → 1-C₆H₄OMe, b_p 140° (81%) → 4,1-MeOC₆H₄COCH₂CH₂CO₂H, m. 172° (quant.), → 4,1-MeOC₆H₄CH₂CH₂CO₂H, m. 120° (70%) → 1-oxo-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrene, m. 98-100° (60%) → Me 1-oxo-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrenecarboxylate, m. 123-4° (90-5%) → Me 1-oxo-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrenecarboxylate, m. 118-21° (50%). I gave estrogenically inactive 1-ethyl-2-methyl-9-methoxy-1,2,3,4-tetrahydro-2-phenanthrene.

Jiri O. Tilek

FIRI O J ITEX

carboxylic acid (II). The Grignard reaction of 19 g. I. in 100 ml. CCl₄, with EtMgBr prepd. from 1.26 g. Mg and 5 ml. EtBr in 50 ml. EtO yielded 8.0 g. (88%) of *Et-1-methyl-2-phenylcyclohexane-1-carboxylate*. II, b.p. 127° (from MeCO), dehydrated by boiling carboxylate, m. 100° (from MeOH). *Et-1-methyl-2-phenylcyclohexene-1-carboxylate* (III), m. 117°, saponid. by evapng. with KOH in dil. EtOH at 140-70° to 80% free acid m. 223° (from MeCO); which, hydrogenated in dil. NaOH 4 hrs. at 50° and 80 atm. initial pressure over Raney Ni, gave after acidification, initial pressure over Raney Ni, gave after acidification, 0.85 g. II, m. 178° (from MeCO and MeOH). Refluxing 0.2 g. III 1 hr. with 1 g. Raney Ni in 20 ml. MeOH gave 0.17 g. *Et-1-methyl-2-phenylcyclohexene-1-carboxylate* (IV), m. 147° (from MeOH). IV, (85%). 1-Et analog of III, m. 147° (from MeOH).

Synthesis of 9a-methyl-1,2,3,4,4a,9a-hexahydro-9-fluorenone. Ibid.: 885-8.—Cyclization of the chloride of 1-methyl-2-phenylcyclohexanecarboxylic acid (I) prepd. by a series of reactions from Et-2-methylcyclohexanone-2-carboxylate (II), yielded 9a-methyl-1,2,3,4,4a,9a-hexahydro-9-fluorenone (III). II, b.p. 112° (38.8 g.) in 30 ml. EtO boiled with PhMgBr (from 5.9 g. Mg and 31.4 g. PhBr in 30 ml. EtO) gave 67-74% *Et-1-methyl-2-phenyl-2-hydroxycyclohexene-1-carboxylate*, b.p. 120°, dehydrated with POCl₃ in CCl₄N to 72% *Et-1-methyl-2-phenyl-2-cyclohexene-1-carboxylate*, b.p. 110° (IV). Sapon. of IV with KOH in dil.

EtOAc at 140-80° gave 81% free acid (V), m. 135° (mp. of MeOH-Me₂CO). Hydrogenation of IV in EtOH over Raney Ni at 60° and 100 atm. pressure gave 80% of ester of I, the latter hydrolyzed in EtOH, m. 135° obtained in almost quantitative yield by the hydrogenation of V in aq. KOH 3 hrs. over Raney Ni at 60° and 150 atm. initial pressure, m. 83° (from nitrate ester). Crude I (10 g.), in 100 ml. Et₂O treated 90 min. with 8.6 g. SOCl₂, the Et₂O evaporated, the residue diluted with 100 ml. CCl₄, the solution cooled, shaken 3 min. with 8 ml. SnCl₄, decanted, with ice and 50 ml. HCl, and the org. layer evaporated, gave 7.5 g. (67%) III, m. 145-7° 1,4-Ethylphenylhydrazide, m. 123° (from EtOH). Mr. Huddley

JILEK, JIRI, O

Ganglionic blocking agents: I. Sulfonium analogs of the lower methonium iodides. Miroslav Frotví, Jiri O. Jilek, and Otto Exner (Farm. biochem. vyzkumny ústav, Praha, Czechoslovakia). *Chem. Abstr.* 47: 600-3f(1953). --As 18

EXNER, O.; SIMAK, V.; JILEK, J.O.; PROTIVA, M.

Synthesis in the estrogene hormone group. Part 1. m-methoxyphenylacetylene
[in English with summary in Russian]. Sbor.Cekh.khim.rab. 19 no.2:330-
332 Ap '54. (MLRA 7:6)

1. Pharmaceutical and Biological Research Institute, Prague.
(Estrogens)

JILEK, J.O.; SIMAK, V.; PROTIVA, M.

Synthesis in the estrogenic hormone group. Part 2. Synthesis of crystalline ethyl 2-methyl-2-carbethoxy-5-(4-methoxyphenyl) cyclohexan-1-one-6-acetate [in English with summary in Russian]. Sbor. Chekh. khim. rab. 19 no.2:333-339 Ap '54. (MLRA 7:6)

1. Pharmaceutical and Biochemical Research Institute, Prague.
(Estrogens)

Jilok, Jiri O.

CZECH

ECH Antitussive substances. ECHI. Contribution to the mechanism of the antitussive activity. Simple benzyl ammonium and benzhydrylammonium salts. Mikolajczyk Chim. Farm. 1978, 133, 103-108, 10 figs, 20 refs.

Protiva, Jit O. Jlek, Outo Esmer, Pinos Barrova, ...
Pilul, Vladislav Simák, und Zilenc, Sedice (Pharm. Mo-
chem., Research Inst., Prague). Collection Lychenhu
 English).—See Cwl

ERVING

JILEK, J.; POMYKACEK, J.; PROTIVA, M.

"Antihistamine Substances. XXXVI. Preparation of Some P-Substituted Analogues of Antistine", P. 232, (CHEMICKE LISTY, Vol. 48, No. 2, Feb. 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

JILEK, Jiri O.

CZECH

Reaction of ethyl 4-carbomethoxybutyrate, hydrazine chloride and of ethyl 4-carbomethoxybutyrate, hydrazine chloride with ammonia. J. Jilek and V. Holub. *Chem. Listy* 48, 1210-14 (1964). Treatment of EtO₂C(CH₂)₃CO₂Et with NH₃ gave a mixt. of NH₄CO₂CH₂CH₂CH₂CO₂Et (I), NH₄CO₂CH₂CH₂CH₂CO₂Et (II), NH₄CO₂CH₂CH₂CH₂CO₂Et (III), and H₂NCO₂CH₂CH₂CH₂CO₂Et (IV). (CH₃)₂CHCONH₂ (V) (EtO₂C(CH₂)₃CO₂Et (21.3 g.) was added to 11.2 g. KOH dissolved in 300 ml. abs. EtOH, the mixt. evapd. in vacuo to remove EtOH, the residue acidified with 20 ml. concd. HCl, the H₂O distd. off in vacuo at 50°, the residue mixed with 100 ml. abs. EtOH, the KCl filtered off, the EtOH distd. off in vacuo, and the residue heated 1.5 hrs. at 150-160° (decarboxylation). 18 ml. of the residue with Et₂O and washing the ext. with 10% Na₂CO₃ gave 6.3 g. (46%) EtO₂C(CH₂)₃CO₂Et (VI), bp. 242-7°. Satg. the soln. of 1.5 g. VI in 4 ml. abs. EtOH and 50 ml. CHCl₃ with HCl at 0° yielded 0.1 g. HCl salt of I, m. 80-93°, decompos. Treating 2 g. HCl salt of I with 10 ml. aq. NH₃ (d. 0.92) and evapz. the soln. to dryness in vacuo after 48 hrs. yielded 0.7 g. III, m. 147-8°.

5161 D. TILK
(from EtOH). In another exp., IV, obtained in addn. to III, m. 107-8° (from EtOH). Treating 2 g. HCl salt of III with 20 ml. 7% EtOH-NH₃ and vac. the solvent, 5.6 ml. 0.1 g. III. EtO₂C(CH₂)₂CO₂H (m. 200°, b.p. 140-4°/10 mm.) was added to 10.5 g. KOH in 500 ml. H₂O. The soln. treated with 42.5 g. Ag₂O in 500 ml. H₂O, the Ag salt filtered, dried 4 hrs. at 100°, finally 3 hrs. at 110° and 1 mm. to give 54 g. EtO₂C(CH₂)₂CO₂Ag. This was suspended in 100 ml. CCl₄, treated during 1 hr. with 10 ml. (31.8 g.) Br₂, the soln. fluxed 30 min., the AgBr removed, washed with CCl₄, the filtrate washed with 50 ml. 10% Na₂CO₃, the CCl₄ dried, and the residue fractionated to give 21.8 g. EtO₂C(CH₂)₂Br (VII), b.p. 101-3° by 29-0°. Adding 25 g. VII in 30 ml. EtOH to a soln. of 14 g. KCN (91%) in 40 ml. H₂O and 70 ml. EtOH at 50°, refluxing the mixt. 45 min., distg. off the EtOH, extra the soln. with 100 ml. Et₂O, and distg. the ext. yielded 12 g. EtO₂C(CH₂)₂CN (VIII), b.p. 128-30° (Satg. the soln. of 16.5 g. VIII in 9 ml. abs. EtOH and 100 ml. CHCl₃ at 0° with HCl, allowing to stand 4 days at room temp., distg. off the CHCl₃ in vacuo at 50°, and adding 50 ml. H₂O to the residue gave 20 g. II, m. 35-36° (b.p. 100-101°/10 mm.). Solving 8 g. II in 40 ml. NH₃ (d. 0.93) gave, after 24 hrs. at room temp., 4.8 g. V, m. 217-20° (from H₂O). The analogous reaction with alc. NH₃ gave no identified product.

SIKEL, JIRI O.

V. Syntheses in estrogenic hormone group. VII. Crystalline methyl-2-methyl-2-carbomethoxy-5-(p-methoxyphenyl)cyclohexanone-6-acetate and attempts to cyclize stereoisomeric 2-methyl-5-(p-methoxyphenyl)cyclohexanone-6-acetic acids. JIRI O. Sikel and Miroslav Protiva (Výzkumný ústav farm. biokem., Prague). *Chem. Listy* 49, 96-105 (1955); *Collection Czechoslov. Chem. Commun.* 20, 755-76 (1955) (in German); cf. C.A. 49, 11568c. — Reesterification of 5 g. Et 2-methyl-2-carbomethoxy-5-(p-methoxyphenyl)cyclohexanone-6-acetate (I), m. 84°, by refluxing 2 hrs. with 42.5 g. MeOH and 0.07 g. Na, decomp. the cooled mixt. with 750 ml. H₂O, extg. with Et₂O, evap., the ext., and dissolving the residue (4.8 g.) in 20 ml. 80% aq. MeOH, and cooling yielded 4.2 g. Me 2-methyl-2-carbomethoxy-5-(p-methoxyphenyl)cyclohexanone-6-acetate, m. 97° (from 83% MeOH). Sapong. 35 g. liquid I (the mother liquor from the crystn. of I) (C.A. 49, 197a) by refluxing 10 hrs. with 28 g. NaOH in 250 ml. H₂O, dilg. the mixt. with 250 ml. H₂O, acidifying with HCl, filtering off the 6 g. of crystals (isomer IIa), m. 206-9° (from EtOH), and extg. the soln. with Et₂O gave 7 g. stereoisomer (IIb), m. 138° (from C₆H₆), of 2-methyl-5-(p-methoxyphenyl)cyclohexanone-6-acetic acid. Adding 5 g. IIa to 25 g. polyphosphoric acid (160°), heating the mixt. 10 min. at 150°, cooling dilg. with 100 g. ice, and extg. with Et₂O gave 4 g. of a lactone (IIIa) of 3-methyl-6-(p-methoxyphenyl)-2-hydroxy-1-cyclohexene-1-acetic acid, m. 91° (from 80% EtOH), which regenerated IIa on alk. hydrolysis. Similar treatment of 5 g. IIb by heating with 25 g. polyphosphoric acid 3 hrs. at 100° gave 4 g. crude and 2.2 g. pure stereoisomer (IIIb), b.p. 210-15° alk. hydrolysis of which gave IIb. Catalytic hydrogenation of 2 g. IIIa in 40 ml. AcOH over Pd in the presence of 2 ml. 80% HClO₄ gave 0.8 g. of an isomer (IVa) of a satd. lactone of 3-methyl-6-(p-methoxyphenyl)-2-hydroxycyclohexanecetic acid, b.p. 185-188° (from 80% MeOH). Similar treatment of 2.2 g. IIIb in 59 ml. AcOH and 1.5 ml. HClO₄ in the presence of Pd catalyst (added twice during the hydrogenation) gave,

after chromatography, 1.15 g. isomeric lactone (IVb), b.p. 103-220° (bath temp.). Reduction of 2 g. IIIa with 1.5 g. LiAlH₄ in 150 ml. Et₂O by refluxing 30 min. gave after chromatography 1.1 g. 2-methyl-5-(p-methoxyphenyl)-6-(3-hydroxyethyl)cyclohexanone, b.p. 190-2°; IIa (11.8 g.) was transformed with 0.7 g. PCl₅ in 30 ml. C₆H₆ to its chloride which, treated with 1 ml. SnCl₄ 3 hrs. at 0°, gave, after decomp. with 15 ml. 3N HCl, 0.06 g. IIa and 0.10 g. of a lactone (Va) of (3-methyl-6-(p-methoxyphenyl)-2-hydroxy)-Δ¹-cyclohexanecetic acid, b.p. 200-10°, m. 116-17° (from Me-cyclohexanecetic acid). Catalytic hydrogenation of OH), sapon. of which gave IIa. Catalytic hydrogenation of 100 mg. Va in 10 ml. AcOH with Pd and 0.1 ml. HClO₄ gave 40 mg. of an isomer (IVaβ) of IVa, m. 103-3° (from MeOH). Similar cyclization of 2 g. IIb yielded after ether extn. and chromatography 0.5 g. of a stereoisomeric lactone (Vb), b.p. 205-15°, m. 99-103° (from MeOH). Thermal cyclization of IIa by heating 0.4 g. IIa 10 min. at 240° gave, after distn. *in vacuo*, 250 mg. of a mixt. of IIIa and Va which regenerated IIa on alk. hydrolysis. Partial hydrolysis of the liquid portion of I (7.4 g.) in 20 ml. EtOH by refluxing 5 hrs. with 1.1 g. KOH in 100 ml. EtOH gave 4.4 g. 2-methyl-2-carbomethoxy-5-(p-methoxyphenyl)cyclohexanone-6-acetic acid (VI), which treated in 100 ml. C₆H₆ at 0° with 4 g. PCl₅, the crude chloride shaken 15 min. at 0° with 4 ml. SnCl₄, and the mixt. decompd. with 20 g. ice and 20 ml. HCl, gave, after chromatography, 1.2 g. (probably) 2-methyl-3-carbomethoxy-7-(p-methoxyphenyl)-1,9-dioxo-1,2,3,4-tetra, 9,10,10a-octalyltropheanthrene, b.p. 200-10°. To verify the formation of unsatd. lactones, 4.5 g. cyclohexanone-2-acetic acid, m. 72-4°, was added to 22 g. polyphosphoric acid at 150°, and the mixt. heated 11 min. at 150°, decompd. with 100 g. ice, and extd. with ether to give 1.8 g. lactone of 2-hydroxy-Δ¹-cyclohexanecetic acid, b.p. 102-5, m. 20-22°. In connection with the syntheses, a mixt. of 13.5 g. Et 2-methyl-2-carbomethoxycyclohexanone-6-acetic acid (loc. cit.) and 8.35 g. BrCH₂CO₂Et was heated with 3.26 g. Zn, 20 ml. C₆H₆, and 70 ml. PhMe 4 hrs. at

(over) C

Jiri O. Jilek

100°, decompd. with 50 ml. 10% AcOH, and the org. layer washed with 50 ml. 10% NH₃ soln. and distd. to give 10.9 g. of a mixt. of stereoisomeric 2-methyl-2-carbethoxy-1,6-bis-(carboethoxymethyl)cyclohexanols, the dehydration of which (5 g.) by refluxing 8 hrs. with 50 ml. 85% HCO₂H gave 2 g. isomeric unsatd. esters, di-Et 2-methyl-2-carbethoxy-1-cyclohexene-1,2-diacetate, and Et 2-methyl-2-carbethoxy-6-carboethoxymethyl-Δ⁴-α-cyclohexanecarboxylate, bp. 130-5°. Infrared spectra of IIIa, IVa, and Va are given. M. Hudlický

JILEK, J.O.

C Z E C H

Synthetic experiments in the histamine group. V. 4-Methylmercaptomethylimidazole. M. Pintara and J. O. Jilek (Výzkumný ústav farm. biochem., Prague). *Chem. Zvesti* 49, 373-4 (1955); *cl. C.A.* 49, 1016c. Treating Me-SNa (from MeSH, 4.6 g. Na, and 100 ml. EtOH) with 14 g. 4-chloromethylimidazole-HCl (m. 144°), refluxing the mixt. 3 hrs., filtering off the salt, and distg. the filtrate *in vacuo* gave 4-methylmercaptomethylimidazole, b.p. 180°/m. 88° (from Et₂O). *HCl salt* (K), m. 151° (from 5:1 Me₂CO-EtOH). 1 (0.2 g.), 2 ml. Me₂ and 1 ml. MeOH refluxed 2 hrs. gave 1-MeI, m. 205-7° (decolorn.) (from MeOH). M. Hudlický

180 g.

JILEK, JIRLO.

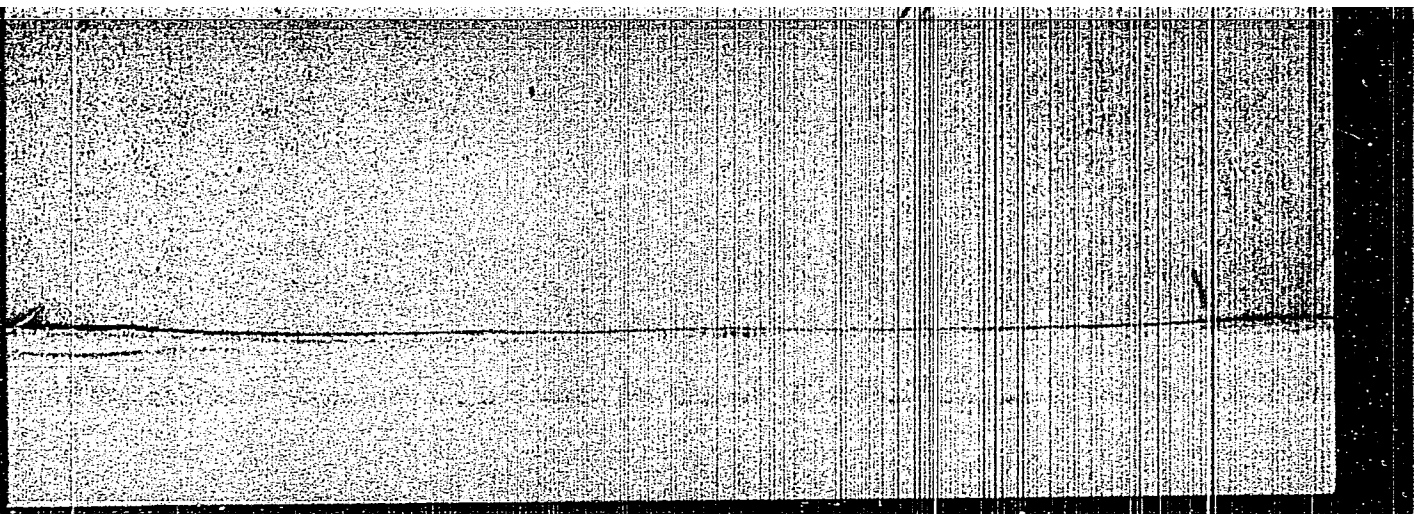
Syntheses in estrogenic hormones group. VIII. The chemistry of 2-methyl-2-carboxy-6-hydroxycyclohexanone derivatives. Miroslav Protiva, Jiri O. Jilek, Ludvik Novák, Edita Adlerová, Vladislav Jirle, and Eduard Knobloch. *Collection Czechoslov. Chem. Commun.* 21, 159-80(1956)(in German).—See C.A. 50, 4048a.

B. J. C.

Mycatalszyn, Y., Jilek, J.O., Protin, M.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3



APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3"

JILEK, J.O.

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11331.

Author : Mychajlyszyn, V. and Jilek, J. O.

Inst :
Title : Synthetic Analgesics. II. Synthesis and Reactions of
Several Hydrogenated Derivatives of 1-Phenylisoquinoline.

Orig Pub: Chem Listy, 50, No 12, 2011-2017 (1956) (in Czech)

Abstract: The reaction of the iodomethylate of 5,6,7,8-tetrahydroisoquinoline with C_6H_5MgBr (in ether at $\sim 20^\circ$) gives 1-phenyl-2-methyl-1,2,5,6,7,8-hexahydroisoquinoline (I), yield 28%, bp $140-143^\circ/0.8$ mm. The benzoylation of 1-cyclohexenylethylamine in 20% NaOH solution gives N-(β -1-cyclohexenyl)-benzamide (II), yield 98%, mp 78° (from alcohol; all mp's reported in this

Card : 1/5

25

CZECHOSLOVAKIA/Organic Chemistry: Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, no 4, 1958, 11331.

to the picrates: 1 gms IV, 0.5 gms III, and 0.7 gms of the picrate of 1-phenyl-1,2,3,4,5,6,7,8-octahydroisoquinoline, mp 130-132°. The hydrogenation of a solution of I in CH₃OH over Pt (from PtO₂ gives 1-phenyl-2-methyl-1,2,3,4,5,6,7,8-octahydroisoquinoline (VII), yield 65%, bp 125-130°/0.2 mm; picrate (VIII), mp 224-225° (from alcohol). The iodomethylate obtained from the crude product of the cyclization of II on hydrogenation over Raney Ni in a methanol solution of KOH gives a mixture of bases, yield 40%, bp 120-140°/0.5 mm, from which 15% IV and 75% VIII are obtained. Chromatography of a petroleum ether solution of the mixture of bases on Al₂O₃ gives free VII. VII and VIII are not identical with the base (nor its picrate) obtained by the action of N-benzylidenecyclohexenylethylamine with dimethyl sulfate

Card : 4/5

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11331.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619620013-3"

(Grewe et al, Chem Ber, 81, 279 (1948); RZhKhim, 1954, 16315), to which the authors assign the same structure. The attempt to convert VII (as well as the compounds obtained by the German workers) to N-methyl-10-normorphine [sic] by heating 60 hrs at 140-150° with H₃PO₄ gave no positive results. For Communication I see RZhKhim, 1957, 30811.

Card : 5/5

JILEK J.

CZECHOSLOVAKIA/Organic Chemistry - Natural Compound and Their
Synthetic Analogs.

G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54013

Author : Jilek, Protiva

Inst :

Title : A Study of the Synthesis of Estrogenic Hormones. XV.
Reaction of Phenylacetylenes with Substituted Cyclo-
hexanones. A New Total Synthesis of Certain Racemic
Doisynolic Acids.

Orig Pub : Chem. listy, 1957, 51, No 4, 643-653

Abstract : 1-ethyl-2-methyl-7-hydroxy-1,2,3,4,9,10,11, 12-octahy-
drophenanthrenecarboxylic-2-acid (I) (from racemic
doisynolic acids) was synthesized in the following
manner:
The reaction of $m\text{-CH}_3\text{OC}_6\text{H}_4\text{=CK}$ (II) with the methyl ester
of 2-ethyl-3-methylcyclohexanecarboxylic-3-acid (III)
in tertiary butanol (six hours at 90°C) resulted in the

Card 1/7

CZECHOSLOVAKIA/Organic Chemistry - Natural Compounds and Their
APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3"

G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54013

formation of the lactone, 1-(*m*-methoxyphenyl-ethynyl)-2-
ethyl-3-methyl-1-hydroxycyclohexanecarboxylic-3-acid (V).
A crude yield of 76% was obtained after chromatographic
treatment on Al_2O_3 , b. p. 190-205°C/0.3 mm. The hydro-
genation of V on Pd/C in methanol lead to the formation
of the lactone, 1- β -(*m*-methoxyphenyl)-ethyl-2-ethyl-
3-methyl-1-hydroxycyclohexanecarboxylic-3-acid (IV);
which was purified by chromatographic treatment with
 Al_2O_3 , b. p. 200-215°C/0.8 mm, 190-205°C/0.2 mm, m. p.
70°C. (from petroleum ether - benzene).
Compound IV was also obtained by direct hydrogenation of
the condensation product of III with II (without the in-
termediate separation of V), yield, 20.4%. The saponi-
fication of V with a 20% methanol KOH solution (boiling
for 20 hours) produced 1- β -(*m*-methoxyphenyl)-ethyl-/-
ethyl-3-methyl-1-hydroxycyclohexane carboxylic-3-acid,

Card 2/7

15

CZECHOSLOVAKIA/Organic Chemistry - Natural Compounds and Their
Synthetic Analogs.

G.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54013

β -(2-phenyl ethynyl-2-hydroxycyclohexyl)-propionic acid (yield 51%, b. p. 180-230°C./1-5 mm, m. p. 83-84°C. (from petroleum ether), which product upon hydrogenation was converted into the lactone, β -(2- β -phenylethyl)-2-hydroxycyclohexyl)-propionic acid, yield 66%, m. p. 98°C. (from petroleum ether). Similarly, III was converted into the lactone of 1-phenylethynyl-2-ethyl-3-methyl-1-hydroxy cyclohexylcarboxylic-3 acid (yield 37%, b. p. 160-180°C./0.9 mm, m. p. 90°C. (from petroleum ether), which after hydrogenation over Pd/C, was converted into the lactone, 1-(β -phenylethyl)-2-ethyl-3-methyl-1-hydroxy cyclohexylcarboxylic-3 acid, m. p. 175-180°C./0.2 mm. II was synthesized from the ethyl ester of β -(m-methoxyphenyl)- α - β -dibromopropionic acid, m. p. 58-59°C. (from petroleum ether), prepared quantitatively by bromination of the ethyl

Card 6/7

17

CZECHOSLOVAKIA / Organic Chemistry, Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract: or by Radney's catalyst under pressure, or with LiAlH_4 , yield 52 to 56%, boiling point $158^\circ/0.5$ mm, melting point 112 to 113° (from benzene). 5-methoxytryptamine, melting point 120 to 121° and 7-methoxytryptamine, melting point 134 to 135° , are prepared according to Spath and Lederer (Spath E., Lederer E., Ber., 1930, 63, 2102). $(\text{CH}_3)_2\text{C}(\text{C}_6\text{H}_5)\text{CONH}$, melting point 160° , is prepared by hydrolyzing $(\text{CH}_3)_2\text{C}(\text{C}_6\text{H}_5)\text{CN}$ with aqueous KOH, it produces $(\text{CH}_3)_2\text{C}(\text{C}_6\text{H}_5)\text{COOH}$, melting point 77° , at the continued hydrolysis in KOH. Hydrochloride

Card 2/11

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances G
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

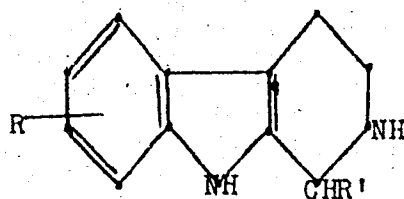
Abstract: corresponding acid, and c/ of the corresponding I
and hydrochloride of the corresponding acid in
 C_6H_6 in the presence of aqueous NaOH at about 20° .
5-methoxytryptamine of PNA (VI), melting point
 117° (from CH_3OH), was prepared of IV according
to the method a, yielded 80%. Triptamide of 4-
methoxy-PNA (VII), melting point 155 to 156° (CH_3
OH), was prepared of I and methoxy-PNA by the
method b, yield 46%. Triptamide of α -phenyliso-
butyric acid (VIII), melting point 137 to 138°
(from benzene), was prepared of I and IV by the
method c, yield 91%. Triptamide of PNA (IX), melt-

Card 4/11

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract:



yield 79%. 7-methoxytryptamide of PNA (XIII),
melting point 101 to 102° (from aqueous CH₃OH),

Card 6/11

02

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances G
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract: harman; MS - melting point 245 to 247°. Other 1,2,3,4-tetrahydronorharmans of the general formula A are prepared (if not indicated otherwise) by the cyclisation of the corresponding triptamide (same as XIV) and reduction of the produced raw 3,4-dihydronorharman (same as XV): A, R = H, R' = $\text{C}_6\text{H}_5\text{C}(\text{CH}_3)_2$ -, (from VIII), MS - melting point 225 to 226°; R = H, R' = 5,6,7,8-tetrahydro-1-naphthylmethyl, (from XIII), hydrochloride - melting point 247 to 253° (from aqueous alcohol), MS - melting point 239 to 241°; R = 6-OCH₃, R' = $\text{C}_6\text{H}_5\text{CH}_2$, (from VI), MS - melting point 249°;

Card 8/11

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619620013-3"

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances G
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract: R = 8-OCH₃, R' = $\text{C}_6\text{H}_5\text{CH}_2$, (from XIII), MS - melting point 249 to 250°; R = H, R' = 4-OCH₃ $\text{C}_6\text{H}_4\text{CH}_2$, (from VII) or by aging 24 g of I hydrochloride with 24 g of 4-CH₃OC $\text{C}_6\text{H}_4\text{CH}_2\text{COCOOH}$ in 600 ml of water and 360 ml of acetic buffer (pH = 3.8) in the duration of 40 days at 37°, decarboxylation of the formed 1-(4-methoxybenzyl)-1,2,3,4-tetrahydronorharman-1-carboxylic acid (melting point of raw acid 223 to 225°; dissociates), passing HCl (gas) through its suspension in boiling CH₃OH, dissolution of the raw product in CHCl₃ and filtration through Al₂O₃; hydrochloride - melting point 252 to 254° (from CH₃OH); MS - melting point 252 to 253°; A, R = H, R' = C_6H_5 , melting point

Card 9/11

JILEK, Jiri O.

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

Author : Miroslav Protiiva, Jiri O. Jilek, Vladimir Hach,
Edita Adlerova, Vladimir Mychajlyszyn.

Inst : American Chemical Society.

Title : Synthetic Models of Blood Pressure Depressing Alkaloids.
II. Simple Models of Reserpine With Cyclohexane Ring.

Orig Pub: Chem. listy, 1957, 51, No 11, 2109-2117.

Abstract: Cyclohexylacetic acid (I) was prepared by the re-
duction of a solution of sodium cyclohexylidene-
acetate on Raney nickel under 110 atm. at 100°,
yield 86%, boil p. 123 to 125°/5 mm; it was con-
verted into cyclohexylacetylchloride (II) by the

Card : 1/11

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

tion by NH_4OH ; that base was reduced with 1.2 g of Na in 120 ml of alcohol to 1-cyclohexylmethyl-1,2,3,4-tetrahydronorharman (V) (yield 3.6 g); hydrochloride, melt. p. 245 to 246° (from alc.); metasulfonate, melt. p. 262 to 265° (from aqu. alc.). Ethyl ester (EE) of 1-oxy-4-methoxycyclohexylacetic acid was synthesized of 4-methoxycyclohexanone (VI) and $\text{CH}_3\text{Br}-\text{COOC}_2\text{H}_5$ in C_6H_6 by the reaction of Reformatskiy, yield 64%, boil. p. 110 to 111°/1.6 mm; it produced the EE of 4-methoxycyclohexenylacetic acid (VII) after 4 hours of action of SOCl_2 in pyridine in an ice bath, boil. p. 120°/14 mm. 4-methoxycyclohexenylacetic acid (VIII) was prepared by 12 hour boiling of VII with

Card : 3/11

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and
APPROVED FOR RELEASE: 08/10/2001

G

CIA-RDP86-00513R000619620013-3"

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

KOH solution in alcohol, yield 85%, boil. p. 150 to 152°/2 mm, melt. p. 27 to 30°. Hydrogenation of VII on PtO_2 in CH_3COOH resulted in EE of 4-methoxycyclohexylacetic acid (IX), boil. p. 120 to 122°/20 mm. By hydrogenation of the aqueous solution of Na salt of VIII on Raney's nickel under 105 atm. at 80 to 90°, or by 12 hour boiling of IX with KOH solution in alcohol, cis-(?) 4-methoxycyclohexylacetic acid was produced, yield 80%, boil. p. 151 to 152°/3 mm, melt. p. 19 to 22°; S-benzylisothiouronic salt, melt. p. 145 to 146° (from alc.). 4-methoxycyclohexylacetyl chloride, boil. p. 108 to 111°/10 mm, synthesized of the

Card : 4/11

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

of $\text{CH}_3\text{COONH}_4$ by 7 hour boiling with azeotropic water removal; XI was boiled 3 hours with 10%-ual NaOH and VIII was produced, yield 61%. 4-methoxycyclohexenylacetyl chloride (XII) produced of VIII and SOCl_2 was added drop by drop with simultaneous cooling to concentrated NH_4OH and 4-methoxycyclohexenylacetamide (XIII) was obtained, yield 45%, melt. p. 126° (from iso- $\text{C}_6\text{H}_7\text{OH}$). 1.5 g of 2-(4-methoxycyclohexenyl)-ethylamine hydrochloride (XIV) was prepared by adding the solution of 3 g of XI in 10 ml of ether drop by drop to 1 g of LiAlH_4 in 10 ml of ether at -5° , 30 min. seasoning at -5° , 2 hour boiling, decomposition with 5 ml of water and 20 ml of 40%-ual NaOH, extraction of the ether

Card : 6/11

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and
Their Synthetic Analogues.

G

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167:

β -methoxyadipinic acid in the mixture toluene-alcohol in the presence of H_2SO_4 at a simultaneous azeotropic removal of water leads to ethyl ester of β -methoxyadipinic acid, yield 80%, boil. p. 118 to 120°/2.5 mm, $n_D^{20} = 1.4336$. By the reduction of EE of 4-oxyphenylacetic acid in alcohol on Raney's nickel in the presence of C_2H_5ONa under 125 atm and at 150 to 160°, EE of 4-oxy-cyclohexylacetic acid was obtained, yield 61%, boil. p. 115 to 116°/0.4 mm, which was saponified by 2 hour boiling with NaOH solution in aqueous alcohol to a mixture of stereoisomeric 4-oxy-cyclohexylacetic acids, yield 94%, melt. p. 110 to 120° (raw). 4-oxy-cyclohexylacetic acid was prepared

Card : 8/11

CZECHOSLOVAKIA/Organic Chemistry. Natural Substances and
Their Synthetic Analogs

G

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167.

melt. p. 177° (from alc. + eth.). Hexahydrohordenine (XVIII) was produced by hydrogenating XVII on Pt from PtO_2 in CH_3COOH , yield 58%, boil. p. 132 to $134^{\circ}/10$ mm; 2-(cyclohexylethyl)-dimethyl-amine was separated as a by-product of hydrogenation, yield 19%, boil. p. 82 to $84^{\circ}/10$ mm; picrate, melt. p. 154° (not adjusted, from alc.). 3,4,5-trimethoxybenzoate of XVIII (XIX), semisolid if impure, was synthesized of XVIII and 3,4,5-trimethoxybenzoylchloride by seasoning (about 12 hours) in C_6H_6 ; hydrochloride, melt. p. 214° (not adjusted, from alc. + eth.). V and X show a hypotensive activity same as their aromatic analogues described in the report I (see RZhKhim, 1958, 61101). The substance XIX is not active. The position of the

Card : 10/11

COUNTRY	:	Czechoslovakia	G-2
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 16 1959, No.	57137
AUTHOR	:		
INBT.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	<p>hydrochloride of I. Antazoline, $C_6H_5CH_2N(C_6H_5)-CH_2C=NCH_2CH_2NH$, (II) yields the following salts: A solution of 5.3 gms II in 30 ml abs alc and a solution of 1 gm H_2SO_4 in 5 ml alc are mixed together to give the ethyl sulfate of II, mp 195° (corr; from alc); 2 gms H_2SO_4 in 7 ml iso-C_4H_9OH are added with cooling to a solution of 5 gms II in 15 ml iso-C_4H_9OH or a solution of 2.2 gms H_2SO_4 in 5 ml C_4H_9OH is added dropwise to a cold solution of 5 gms II in 15 ml n-C_4H_9OH</p>	

CARD: 2/4

JILEK, J.

CZECHOSLOVAKIA/Organic Chemistry. Natural Products and Their
Synthetic Analogues.

G-3

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81760.

Author : Adlerova E., Novak L., Protiva M., Jilek J., Protiva M.

Inst :

Title : The Synthesis in the Group of Estrogenic Hormones. XIV.
2-Substituted Derivatives of 3-Methyl Cyclohexanone
Carbonic Acid . XV. The Reaction of Phenylacetylenes with
Substituted Cyclohexanones. A New Complete Synthesis of
One of the Racemic Doisyolic Acids.

Orig Pub: Collect, czechosl. chem. commun., 1958, 23, No 4, 681-
691; 692-703.

Abstract: See R.Zh. Khim., 1958, 11219, 54013.

Card : 1/1

CZECHOSLOVAKIA/Organic Chemistry Synthetic Organic Chemistry. G-2

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81677.

Author : Mychajlyszyn V., Jilek J

Inst :

Title : The Synthetic Anesthetic Compounds. II. The Preparation
and Reactions of Some Hydrogenated Derivatives of 1-
Phenylisoquinoline.

Orig Pub: Collect czechosl. chem. commun., 1958, 23, No 5, 932-939.

Abstract: See R. Zh. Khim., 1958, 11331.

Card : 1/1

35

JILEK, J.O.; PROTIVA, M.

Synthetic experiments in the group of estrogenic hormones. XIX.
Wagner-Meerwein arrangement of 1-methyl-2-ethylcyclohexylcarbinol
and its analogue in the octahydrophenanthrene series. Coll Cz Chem
25 no.1:165-179 Ja '60. (EEAI 9:12)

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.
 - (Estrogenic hormones)
 - (Rearrangements)
 - (Ethylmethylcyclohexanemethanol)
 - (Octahydrophenanthrene)

ADLEROVA, E.; BLAHA, L.; BOREVICKA, M.; ERNEST, I.; JILEK, J.O.; KAKAC, B.;
NOVAK, L.; RAJSNER, M.; PROTIVA, M.

Synthetic experiments in the group of hypotensive alkaloids. VI.
Some notes on the preparation of alicyclic components in the
synthesis of compounds of the reserpine type. Coll Cz Chem 25 no.1:
221-236 Ja '60. (EEAI 9:12)

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.
(Alkaloids) (Hypotension)
(Alicyclic compounds) (Reserpine)

JILEK, J. O.

~~7-2-Methoxy-3-hydroxy-7-oxo-1,2,3,4,7,8,9,10-octahydro-
dronaphthalene-1-carboxylic acid lactone~~ / M. Protiva and
J. O. Jilek. Czech. 94,236, Feb. 15, 1980. 2-Methoxy-3-
hydroxy-7-oxo-1,2,3,4,7,8,9,10-octahydrodronaphthalene-1-

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619620013-3"

NOVAK, L.; JILEK, J. O.; KAKAC, B.; ERNEST, I.; PROTIVA, M.

Synthetic experiments in the group of hypotensive alkaloids. IX. A new method for splitting racemates in the total synthesis of reserpine.
Coll Cz Chem 25 no.8:2196-2206 Ag '60. (EEAI 10:9)

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.

(Alkaloids)	(Hypotension)	(Tartaric acid)
	(Reserpine)	

JILEK, J. O.; ERNEST, I.; NOVAK, L.; RAJSNER, M.; PROTIVA, M.

Synthetic experiments in the group of hypotensive action alkaloids.
XII. Contribution to the terminal phases of total synthesis of
reserpine and deserpidine. Coll Cz Chem 26 no.3:687-700 Mr '61.
(EEAI 10:9)

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.

(Reserpine) (Deserpidine) (Alkaloids)

JILEK, J. O.; POMYKACEK, J.; PROTIVA, M.

Synthetic tests in the group of hypotensive active alkaloids. Part 15: Synthesis of racemic homoveratrylamine analogues of reserpines and isoreserpines. Coll Cz Chem 26 no.4:1145-1159 Ap '61.

1. Forschungsinstitut für Pharmakie und Biochemie, Prag.

(Alkaloids) (Reserpine)

PROTIVA, M.; CAPEK, A.; JILEK, O.; KAKAC, B.; TADRA, M.

Synthetic experiments in the group of hypotensive active alkaloids.
XVIII. Microbiologic reduction of lactons of the (+)-5-oxo-8 β -hydroxy-cis-1,4,5,8,9,10-hexahydro-1 β -naphthalic acid. Coll Cz chem 26 no.6:1537-1541 Je '61.

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.

(Lactons) (Naphthalic acid)

JILEK, O. J.; KAKAC, B.; PROTIVA, M.

Synthetic experiments in the group of hypotensive active alkaloids.
Part 19: Reduction of (\pm)-5,8-dioxo-cis-1,4,8,9,10-hexahydro-1 β -
naphthoic acid isopropylesters according to Meerwein. Coll Cz Chem 26
no.9:2239-2237 '61.

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.

(Alkaloids) (Esters)

JILEK, J.

CZECHOSLOVAKIA

PROTIVA, M; JILEK, J; POMYKACEK, J; JIRKOVSKY, J; VEJDELEK, Z.

Research Institute of Pharmacy and Biochemistry (Forschungs-
institut für Pharmazie und Biochemie), Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications,
No 10, 1963, pp 2627-2635

"Synthetic Analgetica V. Synthetic Experiments on a Base
of 4-phenyl-4-Carbethoxypiperidine (Norpethidine)."

(5)

ERNEST, I.; JILEK, J.O.; VEJDELEK, Z.J.; PROTIVA, M.

Sythetic experiments in thegroup of active hypotensive alkaloids.
Pt. 26. Coll Cz Chem 28 no.4:1022-1030 Ap '63.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

PROTIVA, M.; JILEK, J.O.; POMYKACEK, J.; JIRKOVSKY, J.; VEJDELEK, Z.J.
SEIDLOVA, V.

Synthetic analgesics. Pts. 5-6. Coll Cz Chem 28 no.10:2627-2636,
2821-2824 0 '63.

1. Forschung institut fur Pharmazie und Biochemie, Prag.

JILEK, J.O.; POMYKACEK, J.; METYSOVA, J.; METYS, J.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.3. Coll Cz Chem
30 no.2:463-471 F '65.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prague.
Submitted May 4, 1964.

JILEK, J.O.; FELZ, K.; PAVLICKOVA, D.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.4. Cell Chem
30 no.5:1676-1683 My '65.

1. Forschungsinstitut für Pharmazie und Biochemie, Prague.
Submitted June 22, 1964.

JILEK, J.O.; POMYKACEK, J.; SVATEK, E.; SEIDLOVA, V.; RAJSNER, M.; FELZ, K.;
HOCH, B.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.2. Coll Cz Chem
30 no.2:445-462 F '65.

¹. Forschungsinstitut fur Pharmazie und Biochemie, Prague.
Submitted May 4, 1964.

JILEK, J.O.; RAJSNER, M.; POMYKACEK, J.; PROTIVA, M., inz. dr., DrSc.,
(Kourimska 17, Praha 3).

Synthetic ataraxics. Part 12. Cesk. farm. 14 no.6:294-303 Ag '65.

1. Vyzkumny ustav pro farmacii a biochemii, Praha. Submitted
December 21, 1964.

JILEK, L.

MYSLIVECK, J.; JILEK, L.

Development of oxygen requirement in certain tissues in rats.
Chekh fiz 2 no.4:363-366 '53. (REAL 3:7)

1. Kafedra fiziologii pri meditsinskom fakul'tete universiteta
im. Karla IV, Praga.

(OXYGEN, metabolism,

*develop. of oxygen requirement in various tissues in
rats, age factor)

JILEK, L.

CZECHOSLOVAKIA / Human and Animal Physiology. Metab- T
olism.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 21859.

Author : Jilek L.
Inst : Univ. Carolina.
Title : Changes in O2 Requirements Following Operations
On the Central Nervous System in Rats-Decort-
ication.

Orig Pub: Med. 1956, 2, No 1, 47-59.

Abstract: Decortication of rats produced a definite low-
ering of O2 requirement in the animals on the
third day following the operation (from 21 ml/
/100 gm of wt. in 5 min. in the normal to
13.4 ml). Under these circumstances the liver
respiration diminished by 54.5%; the kidneys
by 53.8%.

Card 1/1

8

CZECHOSLOVAKIA/ Human and Animal Physiology (Normal and
Pathological). Blood Circulation. General Problems.

T-5

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50769

Author : Myslivecek, J., Jilek, L., Sedlacek, J., Mourek, J.

Inst : Carolina University of Prague

Title : Methods Using Permanent Vascular Cannulae.

Orig Pub : Univ. Carolina. Med., 1956, 2, No 1, 143-149.

Abstract : A recent modification of methods applying permanent cannulae for internal organs in animals is described. These cannulae are made from silon, polyethylene, or polyvinylbutyrol, and are fastened to a silon net which is wrapped around vessels by sutures. Such cannulae (which are similar to the cannulae of London) make it possible to obtain blood in repeated tests, to measure vessel temperature, to record blood pressure, etc. -- N.N. Blokhin.

Card 1/1

Country : CZECHOSLOVAKIA
 Category : Human and Animal Physiology. T
 The Nervous System. Blood Supply.
 Abs. Jour. : Ref Zhur-Biol., No 23, 1958, 106810
 Author : Jilek, Lubor
 Institut. : Katedra fysiologie fakulty vseobecneho lekarstvi Karlovy university
 Title : The Reaction of the Organism to Cerebral Ischemia in Ontogenesis. I. The Development of Resistability to Cerebral Ischemia in Rats.
 Orig Pub. : Sbor. lekar., 1957, 59, No 6, 182-195
 Abstract : Very young rats (up to 16 days old) and adult rats endured well a ligation of both carotid arteries. Four to five weeks old rats succumbed rapidly after such operations. The development of changes in altitude hypoxia and in cerebral ischemia progressed in the same manner. An impairment of the CNS [central nervous system] resulting from disrupted blood circulation in the brain at early developmental stages, may cause the animal's death at later periods. For
 ***v Praze Pracovni skupina vyvolje nervovych funkci. L.J., Fysiologicky
 Card: ustav. Albertov, Praha 2.

JILEK, Lubor

The response of the organism to cerebral ischemia in the course of ontogenesis. IV. Response of the rat to temporary ischemia of the CNS. Sborn. lek. 60 no.7-8:235-241 July 58.

1. Fysiologicky ustav fakulty vsobecneho lekarstvi university Karlovy v Praze prednosta prof. Dr. F. Karasek.

(CENTRAL NERVOUS SYSTEM, blood supply

ischemia, exper. eff. on newborn & adults rats (Cz))

JILEK, Lubor

The response of the organism to cerebral ischemia in the course of ontogenesis. V. Contribution to the research on changes in cerebral metabolism after ligation of the carotid arteries during ontogenesis in rats. Sborn. lek. 60 no.7-8:242-248 July 58.

1. Fysiologicky ustav fakulty vseobecneho lekarstvi university Karlovy v Praze, prednosta prof. Dr. F. Karasek.

(ARTERIES, CAROTID, physiology

eff. of exper. ligation on cerebral metab. in newborn & adult rats (Cz))

(BRAIN, metabolism

eff. of exper. ligation of carotid arteries in newborn & adult rats (Cz))

FISCHER, J.; JILEK, L.

Regeneration of changes in the central nervous system induced by ligation of the carotid arteries in early stage of development in rats. Cesk. fy-siol 7 no.5:452-453 Sept 58.

1. II. patologicko-anatomicky ustav a Fysiologicky ustav fak. vseob. lek. UK, Praha.

(BRAIN, physiol.

regen. of changed induced by carotid ligation in young rats
(Cz))

(ARTERIES, CAROTID, physiol.

same)

JILEK, L.; MARES, P.

Effect of external temperature on resistance of young rats to ligation of the carotid arteries. Cesk. fysiол. 7 no.5:486-487 Sept 58.

1. Fysiologicky ustav fak, vseob. lek. KU, Praha.

(TEMPERATURE, effects,

on resist. of young rats to ligation of carotid artery (Cz))

(ARTERIES, CAROTID, physiол.

eff. of temperature on resist. of young rats to ligation
(Cz))

JILEK, L.; TROJAN, S.

Studies on the development of regulation of cerebral circulation. Cesk. fysiол. 7 no.5:487-488 Sept 58.

1. Fysiologicky ustav fak. vseob. lek. KU, Praha.
 - (BRAIN, blood supply,
 - age factor in develop. of cerebral circ., eff. of body temperature (Cz))
 - (AGING, effects,
 - on brain circ. regulation, body temperature factor (Cz))
 - (BODY TEMPERATURE, physiol.
 - in regulation of cerebral circ., age factor (Cz))